

REMARKS

This is in response to the Official Action currently outstanding with respect to the above-identified application.

Claims 1-37 were originally presented. Claims 26-37 were elected for further prosecution and Claims 1-27 were cancelled previously, without prejudice. Claims 38-55 were subsequently added by Amendment. Thereafter, Claims 30 and 40 were canceled, without prejudice, and Claims 28, 31, 32, 35, 36, 37, 38, 41, 42, 46, 47 and 52 were amended. By the foregoing Amendment, Applicants respectfully request that Claims 29 and 39 be canceled, without prejudice, so as to clarify the claims of this application and that Claim 51 be amended. Applicants do not presently request the withdrawal or addition of any claims. Accordingly, upon the entry of the foregoing Amendment, Claims 28, 31-38 and 41-55 as hereinabove presented will constitute the claims under active prosecution in the above-identified application.

The claims of this application as they will stand upon the entry of the foregoing Amendment are set forth in full hereinabove as required by the Rules.

More particularly, in the currently outstanding Official Action, the Examiner has:

1. Failed to re-acknowledged Applicants' claim for foreign priority under 35 USC 119(a)-(d) or (f), or reconfirm the receipt of the required certified copy of the priority documentation by the United States Patent and Trademark Office. – **These formal matters were handled in a previous Official Action in the parent of this continued prosecution application.**

2. Failed to re-confirmed that the drawings originally filed with this application on 14 September 2000 have been accepted – **The Examiner's acceptance of the drawings as filed on 14 September 2000 appears in an Official Action in the parent of this continued prosecution application;**
3. Acknowledged Applicants' Information Disclosure Statement of 15 Decemeber 2006 by providing the Applicants with a copy of the Form PTO/SB/08a/b duly signed, dated and initialed by the Examiner in confirmation of his consideration of the art cited therein – **All other Information Disclosure Statements filed in this application have been acknowledged by the Examiner in Official Actions in the parent of this continued prosecution application;**
4. Objected to Claim 51 as being grammatically incorrect as currently phrased – **By the foregoing Amendment Applicant has rephrased Claim 51 in a manner that is believed to remove the grammatical error referred to by the Examiner;**
5. Withdrawn his previous application of the Mastie reference against the current claims of this application while reserving the possibility of reviving his reliance thereon as showing the storage of a plurality of pre-specified data units (i.e., PDF files) defining a document in a data storage medium as being a storage medium having a plurality of pre-specified data units stored thereon as currently claimed;
6. Rejected Claims 28-29, 31, 33-36, 38-39, 41, 43-46 and 48-55 under 35 USC 102(b) as being anticipated by the Portable Document Format Reference Manual.

7. Rejected Claims 37 and 47 under 35 USC 103(a) as being unpatentable over the Portable Document Reference Manual, Version 1.2 in view of the Warnock reference (US Patent No. 5,634,064) and further in view of the Ota reference (Japanese Patent No. 5-323941); and

No further specific comment regarding items 1–4 above is deemed to be required in these Remarks.

The Examiner has indicated in the currently outstanding Official Action that “one **could** compose a document stored amongst a plurality of PDF files; he or she would simply store various portions of the document as distinct PDF files, i.e., write a portion of the document and store it as one file, write another portion of the document and store it as another file, etc. In such circumstances, the storage medium storing all the files would be a data storage medium having a plurality of pre-specified data units (i.e., PDF files) that together define a document thereon like claimed.” Applicants respectfully submit that the Examiner’s attempt to modify the basic concept of a PDF file in this manner is not proper.

Thus, it will be seen that according to Section 2143.01 (III) of the Manual of Patent Examining procedure (MPEP), it is settled law that “[t]he mere fact that a reference **can** be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination”. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) Further, it is impermissible simply to engage in hindsight reconstruction of the claimed invention, using applicant’s structure as a template and selected elements from the references to fill the gaps. *In re Gorman*, 18 USPQ2d 1885 (Fed. Cir. 1991)

Still further, Section 2143.01(VI) of our Manual of Patent Examining Procedure makes it abundantly clear that in order for a disclosure of a reference to conform with the standards for the establishment of a *prima facie* case supporting a rejection under 35 USC 103, the proposed modification of the prior art embodied in a claim of an application cannot change the principal of operation of the prior art reference being applied. In other words, if the proposed modification or combination of the prior art relied upon by the Examiner would change the principal of operation of the prior art invention being modified in an attempt to reach the present invention, then the teachings of the combined references **are not** sufficient to establish a *prima facie* case of obviousness under the appropriate stands for the same. *In re Ratti*, 280 F.2d 810, 123 USPQ 349 (CCPA, 1959) As will appear more fully below, Applicants respectfully submit that the Examiner's current expansion of the definition of a PDF file to the extreme of being the same as a pre-specified data unit like herein claimed appears to clearly be an attempt to modify the principals of operation of a PDF file that is improper under this standard.

Accordingly, with respect to item 5, Applicant agrees with the Examiner's withdrawal of the Mastie reference from the bases for his rejections. Applicant **does not** however agree with the basis for the Examiner's stated reservation with respect to the same.

In the latter regard, Applicant respectfully notes that the Examiner has admitted that even if the Mastie page files were to be taken as being PDF files, the formatting of all of the PDF files making up the Mastie document in the Examiner's postulated example would have to be altered so as to conform to the overall formatting of the document after the combination of the PDF page files was made. In such as case, the Examiner postulates that prior to the reformatting contemplated by the Mastie reference, the so stored individual PDF files would meet the terms of the present claims.

As was mentioned in Applicant's previous submissions in this prosecution, however, the alternative of combining a plurality of individual PDF files so as to make up a complete document and thereafter reformatting the same so as to conform with one another in the manner contemplated by Mastie is a concept that is nowhere disclosed, taught or suggested in the art which the Applicant respectfully submits makes very little sense and would not be expected to be a path adopted by one of ordinary skill in the art. Instead, Applicant respectfully submits that it would be expected that one skilled in the art would simply create a single PDF file from the beginning wherein the page objects of each page were utilized in conjunction with the common formatting of a typical PDF document.

In other words, Applicant respectfully submits that it would make very little sense to one of ordinary skill in the art to create and store a plurality of individual PDF page files for the purpose of forming a document and thereafter to reformat those store individual PDF page files into a single combined document having a single PDF document format. Clearly, it would make more sense to create a basic PDF document shell and incorporate the page object data therein such that it all would have the same formatting from the outset.

As mentioned, the theoretical possibility of the combination of a plurality of individual PDF files that each define a document (i.e., a plurality of documents) stored separately so as to make up a document postulated by the Examiner as meeting the limitations of the present claims has not been shown to have been adopted in, or even seriously considered by, the art even though the components thereof have been readily available for some time. Applicants respectfully submit that the reason for this is that one of ordinary skill in the art simply would not make the combination postulated by the Examiner for the reasons discussed above.

Indeed, the Mastie reference, now stated to be unnecessary to his rejections by the Examiner, is a clear indication of the art's tendency to move toward the concept of common formatting for all of the files making up a document that is manifest in the PDF Reference Manual. Further, as will appear in more detail below, the Examiner's insistence upon a reliance upon the thread and bead concepts of the PDF Reference Manual regarding the scrolling capabilities provided by the plurality of individual PDF files that he has postulated as making up a document as being comparable to the present pre-specified data units **appears to totally disregard of the comments presented at pages 30-31 of Applicant's Amendment After Final Rejection filed with the present Request for Continued Examination regarding the correct interpretation of "scrolling", "intervals" and the phraseology placed into the currently pending claims with respect to the same.** In other, words, the Examiner's outstanding rejections require an improper modification of the principals of operation of the PDF document format in order for the Examiner's currently outstanding rejections to make sense. Applicants respectfully submit that this is not proper.

Prior to a discussion of the scroll paths and related features of the present invention *vis a vis* the Examiner's PDF file arguments in view of the foregoing, Applicants have the following comments with respect to the Examiner's request therefore concerning the Sawada and Murasaki references. Specifically, it is Applicant's belief that those newly cited references appear to deal with scanning over images in memory that are larger than the portion thereof that can be displayed at one time. Thus, in Sawada an area surrounding the displayed image apparently is retained in memory such that it is possible to scan outwardly relative to the displayed image easily. The Murasaki reference, on the other hand, deals with the issues of illustrating a scroll speed on a display having a reaction time slower than the scroll speed as well as a scanning feature based upon a set point of reference on the display (i.e., the scanning is done by aligning the new image with the set reference point on the display).

Accordingly, Applicant respectfully submits that there is little (if anything) in common between the Sawada and/or Murasaki references and the present application. Indeed, in the Sawada and Murassaki references the images often (if not always) overlap while in the present invention scrolling is concerned with scanning within a defined area image or from one portion of an article in a document to another separate portion of the article in a different part of the document. Applicant respectfully submits that these are quite distinct concepts and modes of operation.

Returning now to the distinctions between the present invention and the cited PDF Reference Manual, Applicants respectfully again note that the present invention includes the formation of scrolling paths running from display element to display element and in so doing include (***but are not limited to***) display paths running from display element group to display element group. Nevertheless, the Examiner insists upon a reliance upon the “thread” and “bead” concepts of the PDF Reference Manual regarding the scrolling capabilities provided by the plurality of combined individual PDF files that he has postulated as making up a document as being comparable to the present pre-specified data units that together define a document.

Accordingly, it will be recalled that the intervals forming a scroll path in the present invention are specified by line segments respectively defined by coordinate values of a starting point and an end point according to coordinate values assigned to the display elements in the pre-specified unit.

More particularly, despite the Examiner's detailed analysis of the Portable Document Format Reference Manual, the fact remains that present invention stores the display data associated with an entire data grouping together, rather than in a form dependent upon selections from the catalog of display and formatting functions stored for the entire document as is done in a PDF document file. This display data includes image object data, management information associated with each stored image object data and scroll information associated with each image object data, **in distinct, separately controllable pre-specified units (i.e., distinct files) containing only a portion of all of the display data associated with a document to be stored on the storage medium and in direct association with the management information specifically associated therewith.** This is different from the so-called dynamic formatting referred to by the Warlock, et al. reference as being unsatisfactory as well as being different from the disclosures of the Portable Document Format Reference Manual. In both of those references it is necessary to store the **entire document or the like** in a computer memory as a so-called "PDF (Portable Document Format) document" before any portion ("pre-specified data unit") can be accessed or displayed.

Applicants therefore again respectfully submit and emphasize that a close reading of the PDF Manual clearly suggests that while the Examiner's factual analysis concerning the "bead" concept of identification of article segments and the page co-ordinate definition of each article segment may seem to be supported by the PDF Manual, the Examiner has forgotten (or not noticed) that ***no matter how one approaches the PDF format, it is necessary in the use of each page, or article portion thereof to refer back to information stored as part of the whole PDF file outside of the so-called "page objects" (Note: the PDF Reference Manual discusses PDF files as representative of entire documents including a header, a body, a cross-reference table and a trailer (see chapter 5) wherein the body is made up of various indirect objects such as fonts, pages and sampled images, see page 62).***

Thus, despite other similarities to the present invention, in the article and/or page context, the PDF Reference Manual makes it clear that each selected portion of a so-called “page” that is defined by the so-called “beads” must refer back to the so-called “Contents” parameter of the “page” of which it forms a part. Hence, each article portion must refer back at least to the page information from which it is extracted in order to be appropriately utilized in a scrolling display of an entire article (particularly an entire article having different portions on different pages). In fact, while it is possible to create PDF units containing one or more separate document pages, there is no provision in the PDF format for saving the data and management information representing defined article segments as separate pre-specified units (Claim 28) or distinct files (claim 38).

Further, while the PDF Manual at certain points seems to broadly suggests that each so-called “page” may be basically separate unto itself as an abstract concept, **the true, real world fact is that at least part of the display information and associated scroll information for each such page depends upon information created and saved in the body portion of the PDF file separately from the page objects (data) in question during the course of the creation and saving of an entire PDF format type document.**

Consequently, the pre-specified units of the present invention to the extent that they may individually represent pages or article portions contain within themselves all of their own display information, including scroll display control information. The PDF Document Format, on the other hand, does not contemplate that each so-called “page” is to be a pre-specified unit in the sense of the present invention. This is because the display control including scroll display information (for example, the required drivers) are embedded in the PDF file and associated with the data to be displayed by higher level operators associated with the data via catalogs that assemble the various objects making up the body of the PDF file to achieve the desired complete document display.

Thus, while the PDF Reference Manual at first reading appears to be discussing the manipulation of documents, pages of documents and article threads running through the documents, a more detailed reading of that manual indicates that the foregoing is but the highest level of explanation of the actual PDF concept. ***This is readily apparent to anyone who has used a PDF document obtained from an outside source from the fact that the entire document has to be downloaded and processed by the computer involved before any part of the PDF document can be accessed for use.***

When reduced to its basics, therefore, Applicants respectfully submit that the PDF concept stores “documents” in the form of “pages” (i.e., groups of page objects) separately from at least some of the data contemplated as being necessary for display of the individual image data (page objects), and separately from all of the other information necessary for the association of that image data (“page objects) in the form of appropriate control sequences including the parameters required to achieve the association and control of the display of various combinations of the image data (“page objects”) as desired.

Accordingly, Applicants respectfully submit that the PDF Manual clearly indicates that the PDF concept might be characterized as including a PDF file containing all of the information making up the document in a database sort of collection (the so-called “body”) including various levels of association of that data that can be accessed and displayed or otherwise used. Hence, it is clear that the so-called “threads” connecting the various portions of an article in the PDF Reference Manual are not the same as (or even akin to) the vectors within the article components of the present invention. In support of the latter interpretation, Applicants respectfully call attention to the fact that at page 27 of the PDF Manual it is indicated that a PDF file contains a PDF document ***and other supporting data.***

Further, the PDF Manual states that **in addition to a document a PDF file contains the version of the PDF specification and information about the location of important structures within the file**. Further still, at page 28 the PDF Manual indicates that the required printer driver consists of a stream of commands **that are converted into PDF operators which are embedded in the PDF file**. Also, page 62 the PDF Manual indicates that the body of a PDF file consists of a sequence of indirect objects representing a document, and that **those objects represent components of the document such as fonts, pages and sampled images**.

Therefore, Applicants respectfully submit that it is not surprising that in the discussion of optimized PDF files the PDF Manual notes that it is contemplated that **the various "pages" of a PDF document will share objects and resources**. It also is not surprising that the various pages are contemplated to have **common attributes and that those common attributes may and will be "inherited" from the preceding page unless otherwise specified**. See, pp 77-78; Section 7.4 and pp. 254, 270 and 274.

Consequently, as emphasized above and now specifically claimed in each of the independent claims of this application, the PDF Manual does not disclose that the management information including scroll display information associated with each image data object or contiguous group of data objects is maintained in association with that image data object or group of objects in a pre-specified unit (distinct file) within which it is stored, nor does the PDF Manual disclose that a complete formatted document, document portion or the like may be separately reproduced by an associated display device using only the management information including scroll display information contained in each of various pre-specified units (i.e., distinct files) in linked association with one another. The PDF document is stored and utilized as a complete whole even in those cases wherein only a specific article or the like is actually displayed and read by the user.

Perhaps most importantly regarding the currently outstanding rejections, Applicants respectfully submit that as previously stated the Examiner has Failed to accord appropriate weight to, or seriously misunderstood, the Applicants' use of the word "intervals" in the claims of this application as applying to parameters akin to the "T", "N" and "V" parameters of the PDF Reference Manual that identify the line segments having different directions in a coordinate section defined by the PDF file, i.e., the "thread" (defined as the "scroll path" in the PDF Reference Manual) connecting the various "beads" associated with the article content portions delineated by the "R" parameter. In fact, however, the presently claimed "intervals" more closely correspond to the article content portions delineated by the "R" parameters (i.e., the "beads") of the PDF reference Manual. In support of this interpretation, Applicants respectfully refer the Examiner to pages 81-97 of the present specification whereat it is explained that the arrows in the Partial Blocks identified in Fig. 37 within the respective pre-specified display units are the "intervals" that together form a "scroll path" of the display element content along which said scroll display is to be conducted in the present invention and the method by which that is accomplished is explained. In other words, the "scroll path" in the present claims is the path made up of the sequential display of the actual display elements that are to be displayed, not the path connecting rectangles surrounding various portions of an article content to be displayed together as a group simultaneously according to their respective positions along the "scroll path" (or thread) of the PDF Reference Manual.

To clarify the latter point, the claims of this application were previously amended so as to clearly indicate that the "intervals" as herein claimed refer to portions of the actual display element content that together make up a "scroll path" that defines the display element content of the respective pre-specified display data units or portions thereof that are to form the actual content of the "scroll display" (i.e., the predetermined sequence of data elements).

Thus, each “interval” in the present invention has a direction associated with it, and some or all of those directions may be the same or different depending upon the particular scroll path (data content) to be displayed. Accordingly, the portion of the present invention that links the “intervals” with one another is part of the information for selecting among the display elements for scroll display to be found in the “predetermined sequence” in which the display elements are displayed. Further, as now clarified, the information for selecting among the display elements for scroll display linking the “intervals” may take the form of information specifying vectors associated with the content of the pre-specified units or distinct files herein claimed.

Accordingly, in addition to the reasons discussed above that distinguish the present invention from the disclosure of the PDF Reference Manual, Applicants again respectfully submit that the present invention is clearly and unambiguously distinct from any and/or all of the art cited by the Examiner taken alone, or any combination thereof, by the fact that the “scroll path” hereinabove claimed is a scroll path defined by “a starting point and an end point in a coordinate system defined by said pre-specified unit according to coordinate values assigned to the display elements in said pre-specified unit”. Specifically, this is to be distinguished from a scroll path defined by factors such as “T”, “N” and “V” parameters used to define pathways between the various portions or sections of a document that are displayed simultaneously as groups represented by a PDF file defined by the “R” parameter that is denoted by 4 values, wherein those 4 values identify the coordinate values of the corners of a rectangle surrounding the associated simultaneously displayed article content” in a coordinate system assigned to the content of the entire document of which those portions form a part by the PDF file as described in the PDF Reference Manual.

Perhaps more clearly and distinctly stated, the “scrolling” of the present invention is directed to the actual display element content that makes up the “scroll path” referred to in the present specification and claims rather than to “beads” containing blocks of simultaneously displayed element data joined by “threads” leading sequentially from one bead to the next. Hence, it is to be understood that the “scroll path” as defined and contemplated by the present invention delineates the actual scrolling content with the gaps therebetween delineated by vectors (links) pointing to the next sequential portion of the actual display data. Accordingly, the “scroll path” contemplated by the present specification and claims is not a series of blocks (“beads”) of data that are to be presented simultaneously as units to a user so as to be readable in a sequence determined by so-called “threads” connecting the various “beads” as in the PDF Reference Manual disclosure. Rather, the “scroll path” of the present invention is the actual content of a prescribed path from display element to display element, not block of display elements to block of display elements as in the PDF Reference Manual context. In other words, the sequential display of blocks of text that make up an article of interest for example is not the same as the sequential display of the words that make up the text of the article of interest. In the one a block of information is presented simultaneously as a group for the use of the user, in the other, the sequence of use of the content of the article is predetermined for the user and presented in the sequence in which it is to be used.

Applicant respectfully submits that the foregoing concept (that is believed to be clearly determinative of the distinct differences between the present invention and the PDF Reference Manual disclosure) has been totally disregarded (or not recognized) by the Examiner heretofore during this prosecution. Applicant respectfully submits in this regard that once this concept is appreciated by the Examiner the patentability of the present invention over the art currently of record will be readily and completely apparent.

In view of the foregoing Amendment and Remarks, therefore, it is respectfully submitted that all of the claims that will be present in this application upon the entry of the foregoing Amendment now are in condition for allowance. Accordingly, entry of the foregoing Amendments, reconsideration and allowance of this application in response to this communication are respectfully requested.

Applicants also believe that additional fees beyond those submitted herewith are not required in connection with the consideration of this response to the currently outstanding Official Action. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge and/or credit Deposit Account No. **04-1105**, as necessary, for the correct payment of all fees which may be due in connection with the filing and consideration of this communication.

Respectfully submitted,

Date: August 13, 2007


SIGNATURE OF PRACTITIONER

Reg. No. 27,840

David A. Tucker
(type or print name of practitioner)
Attorney for Applicant

Tel. No. (617) 517-5508

Edwards & Angell, LLP
P. O. Box 55874
P.O. Address

Customer No. 21874

Boston, MA 02205